## 2014 Immune Risk Standing Review Panel Status Review

#### **Statement of Task for:**

Risk of Crew Adverse Health Event Due to Altered Immune Response

# Comments to the Human Research Program, Chief Scientist

2014 Immune Risk Standing Review Panel (SRP) Status Review WebEx/teleconference Participants:

#### **SRP Members:**

Gailen Marshall, M.D., Ph.D. (Chair) – University of Mississippi Medical Center Sandeep Agarwal, M.D., Ph.D. – University of Texas Medical School at Houston Nancy Klimas, M.D. – Nova Southeastern University

### **NASA Johnson Space Center (JSC):**

Pam Baskins
Ronita Cromwell, Ph.D.
Brian Crucian, Ph.D.
Peter Norsk, M.D., dr. med.
Michele Perchonok, Ph.D.
Clarence Sams, Ph.D.
LaRona Smith
Susan Steinberg, Ph.D.

### NASA Headquarters (HQ):

Bruce Hather, Ph.D.

### **National Space Biomedical Research Institute (NSBRI):**

Graham Scott, Ph.D.

### NASA Research and Education Support Services (NRESS):

Tiffin Ross-Shepard

On December 5, 2014, the Immune Risk SRP, participants from the JSC, HQ, the NSBRI, and NRESS participated in a WebEx/teleconference. The purpose of the call (as stated in the Statement of Task) was to allow the SRP members to:

- 1. Receive an update by the Human Research Program (HRP) Chief Scientist or Deputy Chief Scientist on the status of NASA's current and future exploration plans and the impact these will have on the HRP.
- 2. Receive an update on any changes within the HRP since the 2013 SRP meeting.
- 3. Receive an update by the Element or Project Scientist(s) on progress since the 2013 SRP meeting.
- 4. Participate in a discussion with the HRP Chief Scientist, Deputy Chief Scientist, and the Element regarding possible topics to be addressed at the next SRP meeting

Based on the presentations and the discussion during the WebEx/teleconference, the SRP would like to relay the following information to Dr. Shelhamer, the HRP Chief Scientist.

Even though the SRP just had a site visit review with the immune portfolio in February 2014, the SRP is pleased with the progress and program development since then. Dr. Crucian and his team are to be commended for their strong work and innovative future plans.

The SRP thinks that going forward, Dr. Crucian and other investigators must duplicate blood drawing/processing conditions in their ground—based models with those associated with astronaut samples obtained during flight — or at the very least present compelling data to show the equivalency of various collection/processing methodologies. This will be especially important going forward as methodologies for in–flight sampling change. The natural tendency will be to do direct data comparisons of astronaut and/or ground-based controls using different collection methodologies. This must be demonstrated with direct comparisons of the different collection methods using the same assays in the same labs.